



IMAGE Format

Bottle Format
Inspection System

Bottle Format Inspection System – IMAGE FORMAT

Designed for increased efficiency, reduced costs, and worker safety through automation.

The system detects and classifies bottles based on height, contour, color, and type of closure, ensuring accurate sorting.

Capable of handling up to **120,000** containers per hour, this compact, user-friendly system easily integrates into your production line, offering a comprehensive solution.



Benefits

Improved Efficiency and Productivity

Automated sorting systems substantially reduce the time needed to sort bottles and increases overall production speed, while eliminating errors.

Reduced Costs and Improved Safety

Automated sorting reduces labor costs associated with manual sorting and reduces the physical demands and the risk of injury to workers.

Improved accuracy reduces the risk of damaged bottles, saving on waste and repair costs.



Application

For returnable glass and PET bottles

- Production / non- production sorting
- Empties' sorting
- Single-line installation on the conveyor
 - To guarantee the required number of bottles on the filler
 - To avoid filling wrong bottles
 - To maintain continuous bottle flow



Detection

Classification of bottles via

- Bottle height
- Contour (diameter / shape)
- Colour
- Type of closure



Process

BBULL IMAGE[®]

Teach-In

- good bottles
- bad bottles (to increase accuracy)
- Grouping of bottle types into different categories
- Category dependent handling

Library based

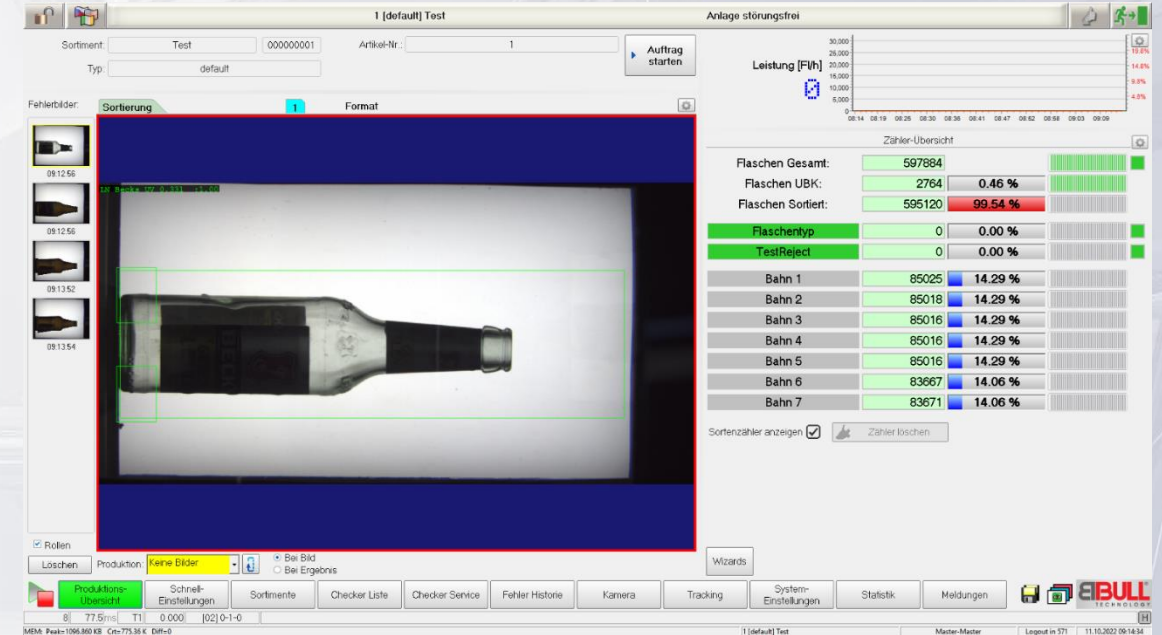
Extendable

Combinable

Versatile algorithm

“Deep-Learning” capabilities

Remote support

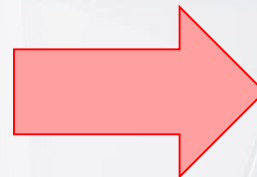
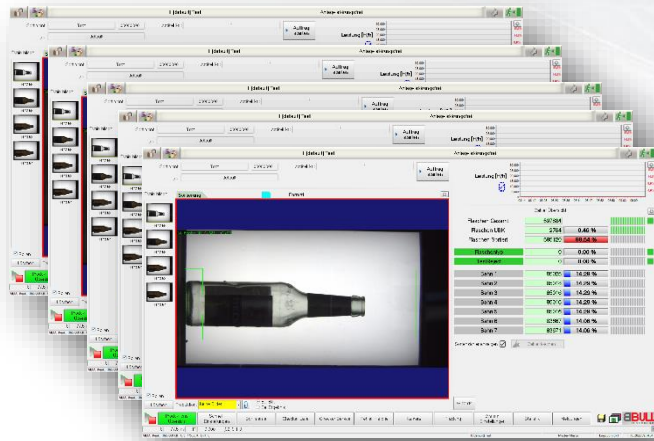


Expandable with Deep Learning

Only with the THETA Line control unit

During a learning phase, several hundred images are recorded and made available to the algorithm. The algorithm remembers recurring characteristics on the bottles and assigns them to a bottle type. This type can then be named and handled accordingly.

Resulting in significant higher accuracy and an easier teach-in process.



Features



Up to **120,000** containers per hour

Integrated tracking

Operation & visualisation via

- 21" display

Easy teach-in

Advanced statistics

Connectivity with other BBULL systems

Multi-line concept

Cascadable- & expandable

Remote maintenance

Compact design

No wear LED background illumination

Telecentric optic to avoid distortion by differing bottle positions

High resolution camera maps complete bottle

No height adjustment necessary

Expansions

Fill Level Inspection

- **Alpha X**

Label Inspection

- **IMAGE 360**
- **IMAGE 120**

Recommended Rejection System

- **BOS** – Servo-driven discharge system
- **VARIOCURVE** – Servo-Driven discharge system





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Take the Next Step!

Request Further Information Today

Contact us to learn more about our system and how it can help your business succeed. Our team of experts is ready to answer any questions and provide you with a personalized solution.

Don't wait, make a call or send an email today and learn about the difference our system can make!

